Smallest low power WiFi solution in the world - from Sweden!

Stockholm-based, Nanoradio AB chose the GSM Show to launch its first generation WiFi chipset solution "NRX700" for portable electronics.

The NRX700, with a total die size of 20 mm^2 claims the smallest footprint on the market. It also has the lowest power consumption in the world in transmit, receive and stand-by compared to any one or two chip solution available today. Target markets are mobile phones, portable media devices and other battery driven handheld consumer devices.

The NRX700 is a two chip solution comprising a SiGe RF transceiver chip NRX510, with on chip RF PA and a CMOS baseband-MAC chip NRX701, with onchip power management. NRX700 chipset is available both as bumped die, NRX510 and NRX701, and in a system in package solution NRG720 including RF filters, baluns and antenna switch. The power consumption for the NRX700 chipset is at +18dBm RF output only 130mA, during receive mode 53 mA and in standby 0.05mA. For module manufacturers the NRX700 chipset offers an 1.5-2 USD cost advantage in the BOM as well as reducing total footprint compared to any one chip CMOS solution due to the integration of RF PA and power management into the chipset and the overall small die size.

Nanoradio says the NRX700 is meeting demand for voice over IP, driven by the fixed to cellular convergence, as well as the revolution in media content transforming to digital mobile media.

"The IP telephony going mobile and the transformation of mobile phones into media devices are two demands that Nanoradio is committed to meet" says Pär Bergsten, CEO of Nanoradio AB. "Also, Nanoradio is the first in the world to support the emerging need for WLAN into headsets and other audio devices and is demonstrating a full form fit function WLAN stereo HiFi headset at the 3GSM show in Barcelona. By providing audio support in our chipset using the same interfaces as Bluetooth, we provide an easy integration path for companies that want to merge to a higher bandwidth and lower power consumption technology".

Evaluation kits of the NRX700 and NRG720 are available now, and production quantities will be available from Q3-2006.

Nanoradio has expanded by over 100 since May 2005, when it received funding by a European investor syndicate and can now support customers locally by representation in Japan, Korea, Taiwan, USA and Europe. It was founded in March 2004 by various ex-Ericsson engineers. For instance, Pär is an entrepreneur with 20 years of experience in telecoms having worked for 14 years at Ericsson, where he introduced RF ASIC technology and linearisation technology into base stations. He started up the first 3G base station development to NTT as Project and Technical Manager. After the Ericsson period, Pär founded Wireless Solutions Sweden AB, where he acted as CEO and CTO.

For more details, visit:
www.nanoradio.com

TriQuint RF front-end design for WCDMA / EDGE handsets

TriQuint Semiconductor Inc launched a Wideband Code Division Multiple Access (WCDMA) total RF front-end solution. It is supported by a complete product line-up of highly-integrated modules that claims to offer manufacturers best-in-class power efficiency, greater battery conservation, lower cost and smaller module sizes that enable the compact 3G handsets consumers favour.

Development of TriQuint's complete WCDMA RF front-end solution (signal amplification, switching and filtering between the antenna and transceiver) comes in response to the wireless phone industry's transition from GPRS to the higher data rates offered by EDGE and the move toward full-3G data rates (up to 2.3 Mbps) offered by WCDMA.

"Our goal is to simplify design of the handset RF front-end," said TriQuint's Bruce Fournier. "To that end, we have assembled an array of technologies that enable us to provide designers with integrated RF blocks that speed time to market while providing the performance and size advantages that have long been associated with technology integration."

As EDGE systems grow by more than 37 m subscribers in 2005, according to the GSM Association, and manufacturers look toward realising even higher data rates in WCDMA systems, TriQuint sees the opportunity to use its broad in-house technology portfolio (GaAs for switches and power amplifiers, surface acoustic and bulk acoustic wave for filtering, along with TriQuint's proprietary technology including CuFlip flip-chip copper pillar interconnect processes), to maximize efficiency between front-end components, producing multiple benefits for WCDMA / EDGE manufacturers.

"The Global mobile Suppliers Association reported in January that by the end of 2005, there were 100 3G (WCDMA) networks operating in 42 countries - growth of more than 20% in one year. Consumers are drawn to the high data rates of 3G and the services they enable, but, because 3G handsets are more complex, the handsets at first tended to be bigger and bulkier than previous generations. TriQuint has been driving size through integration, enabling designers to create small and thin form factors for their next generation of handsets," said Fournier.

For more details, visit:
www.triquint.com